

ORLOV, V.V.; BYKOV, I.M.

Intubation anesthesia in pediatric urology. Urologia 25 no. 5:9-12
S-O '60. (MIRA 14:1)

(UROLOGY) (INTRATRACHEAL ANESTHESIA)

(PEDIATRIC ANESTHESIA)

BYKOV, I.M.

Large solitary cyst of the kidney in a child. Khirurgiia 37
no.4:129-131 '61. (MIRA 14:4)

1. Iz kafedry detskoy khirurgii (zav. - prof. A.F. Zverev) Sverd-
lovskogo meditsinskogo instituta.
(KIDNEYS—TUMORS) (CYSTS)

BYKOV, I. M.

Indications for nephrectomy in children. Urologia no.2:32-34
'62. (MIRA 15:4)

1. Iz kliniki detskoy khirurgii (zav. - prof. A. F. Zverev)
Sverdlovskogo meditsinskogo instituta.

(KIDNEYS--SURGERY)

BYKOV, I.M.

Plastic operations on the kidney pelvis and ureter in children.
Urologiia 27 no.4:6-10 J1-Ag '62. (MIRA 15:11)

1. Iz kliniki detskoy khirurgii (sav. - prof. A.F. Zverev)
Sverdlovskogo meditsinskogo instituta.
(URETEROPLASTY) (KIDNEYS—SURGERY)

BYKOV, I.M.

Surgical treatment of various complications of nephrolithiasis
in children. Khirurgiia 39 no.4:96-102 Ap'63 (MIRA 17:2)

1. Iz kliniki detskoy khirurgii (zav. - prof. A.F. Zverev)
Sverdlovskogo meditsinskogo instituta.

BYKOV, I.M.

X-ray diagnosis of nephrolithiasis in children. Urologia. 29 no.2:51-53 Mr-Apr '64. (MIRA 18:7)

1. Klinika detskoy khirurgii (zav. - prof. A.F.Zverev) Sverdlovskogo meditsinskogo instituta.

BUZINOV, S.N.; BYKOV, I.N.; UMRIKHIN, I.D.

Determining the location of the flow between reservoirs from
the data of investigations. Gaz. prom. 7 no.9:9-13 '62.
(MIRA 17:8)

BYKOV, I.N.; MUSIYENKO, V.F.

Results of experimental gas injection into the Olishevka
structure. Gaz. prom. 10 no.9:48-52 '65.

(MIRA 18:11)

RUZHITSKIY, V.O.; BYKOV, I.N.; TOCHILIN, M.S.; KURYLEVA, N.A.; MOLOTKOV, S.P.

Ultrabasic ~~explosion~~ breccia of the Russian Platform. Dokl. AN SSSR 162 no.6:
1367-1369 Je '65. (MIRA 18:7)

1. Voronezhskiy gosudarstvennyy universitet. Submitted March 18, 1965.

BYKOV, I. R

3

AUTHOR: Ginzburg, Z.L., Engineer

SOV/122-58-7-30/31

TITLE: Production Engineering and Technical Session on the Exchange of Experience in the Utilisation of Natural Gas in Industrial Furnaces of Engineering Plants (Proizvodstvenno-tekhnicheskaya sessiya po obmenu opytom ispol'zovaniya prirodnogo gaza v promyshlennykh pechakh mashinostroitel'nykh zavodov)

PERIODICAL: Vestnik Mashinostroyeniya, 1958, nr 7, pp 86-87 (USSR)

ABSTRACT: The session was called by the Khar'kov sovnarkhoz (Khar'kov Economic Council), the metal-working section of the nauchno-tekhnicheskoye obshchestvo mashinostroitel'noy promyshlennosti (Scientific and Technical Society for the Engineering Industry) and the Institut ispol'zovaniya gaza v kommunal'nom khozyaystve i promyshlennosti AN USSR (Institute for Gas Utilisation in Communal Services and Industry at the Ac.Sc. Ukrainian SSR). V.K. Tarasenko Engineer of the Zavod transportnogo mashinostroyeniya (Transport Machinery Works) imeni Malysheva reported on experience in the operation of forge-heating furnaces and open-hearth furnaces with natural gas. The use of flameless injection burners is permissible in forging shops and rough-heat treatment shops when heating forging blanks

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of medium cross-section not subject to rigid control of mechanical properties. The use of flame-type two-channel burners is acceptable in all shops, including heat-treatment furnaces for finish treatment and furnaces for the heating of components and blanks of arbitrary cross-section subject to rigid control of mechanical properties. Such burners ensure a greater stability of the furnace. Gas burners cannot be placed anywhere in the working space of the furnace. Their optimum position is 400-450 mm above the sole of the furnace or 200-250 mm above the surface of the charge. In heat-treatment furnaces, especially with multi-layer charging, rapid heating is achieved by placing the burners at the furnace sole level. In co-operation with the Gas Utilisation Institute of the Ukrainian Ac.Sc., the lecturer's works developed a successful method for the heating of large ingots. Injector burners did not ensure the required uniformity and rate of ingot heating. 22 hours were needed for an ingot of 13 tons (compared with 10 hours with oil). The residual oil atomisers, type RDB, with

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double atomisation, were used with changed nozzles. A torch type gas combustion was achieved which heated the ingots in 10 hours. The fuel cost per ton of output is reduced compared with oil. A typical value is 55 roubles compared with 80 in forge-heating furnaces. Forging and heat treatment shops have achieved automatic temperature control with the help of an electronic-hydraulic installation, designated RTEG-1. I.N. Karp, Engineer, of the Institute of Gas Utilisation, reported on work at the imeni Maysheva Works to improve the combustion of natural gas in a 40-ton open-hearth furnace. The two-channel burner was replaced by a single-channel burner and the shape of the working space of the furnace was changed resulting in a significant improvement. The practice of working with furnaces fired by natural gas installed in the Khar'kovskiy traktorniy zavod (Khar'kov Tractor Works) was discussed by I.R. Bykov, Engineer. 97 heat-treatment furnaces and forge heating furnaces and 32 drying furnaces have been converted to a natural gas. Two-channel low-pressure

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pressure of 250 mm water column and an air pressure of 500 mm water column were used. It was necessary to increase the gas pressure to 500-700 mm water column. The furnaces were modified from under-floor to side heating. Nemirovskiy, A.Ya., Engineer, of the Motorostroitel'nyy zavod (Engine Works) "Serp i Molot", reported on the conversion to natural gas of forge-heating furnaces and boilers. The former are equipped with injector burners of 5 sizes ranging from 6 to 18 m³/h capacity. In the drop-hammer section, two-channel burners of 16-60 m³/h capacity are used. The furnaces are equipped with screens to induce air circulation. It has been shown by gas analysis that, in using injector burners, the air excess coefficient is lower than in using two-channel burners. The coefficient amounts to 1.05-1.1. Increasing the loading of the hearth by reducing its surface area made it possible to reduce the specific fuel consumption and increase the furnace output. The drying kiln, the furnace for heating

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and firing of blocks and other units in the foundry have been converted to natural gas. Single-conduit, three-nozzle burners of 30-50 m³/h capacity are used. Single-conduit multi-nozzle burners have given good service in boilers. Kopytov, V.F., Corresponding Member of the Ac.Sc. Ukrainian SSR, lectured on new heating methods in forging shops. Several variants exist for using natural gas in non-oxidising metal-heating furnaces. The construction of such furnaces is associated with the production of fire-bricks and fire-resistant materials for high-temperature recuperators and regenerators. At present, the Gas Utilisation Institute is working on the solution of a reliable non-oxidising heating method for forging and stamping. A.Ye. Yerimov, Engineer, of the Institute of Gas Utilisation, reported on the conversion of industrial furnaces from producer to natural gas. The existing gas-burning equipment can be used by simply reducing the cross-sections for gas flow. Kcvalenko, V.V. of the IIG AN USSR (Institute of Gas Utilisation) lectured on drying kilns with infra-red gas heating when working with

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natural gas. The heating conditions are controlled by the gas flow or by connecting rows of radiating panels. A study carried out to determine conditions of drying for UE-11 and UE-41 enamels or of UVL-1 and ML-21 lacquers on the bodies of sewing machines has established that good drying takes place over the whole surface. With a temperature of 400-450 °C at the radiating surface, satisfactory drying is accomplished in 4-6 minutes without discoloration. The use of the mixture of the combustion products of natural gas and air as a heat carrier has made it possible to simplify and cheapen significantly the design of the drying plant and to increase its efficiency. The fuel consumption has been reduced by a factor of 2.2. The duration of drying has remained the same as in drying with air heated to the same temperature. Gol'dinov, L.T., Engineer, of the Khar'kovskiy velozavod (Khar'kov Bicycle Works) delivered a paper on the possibilities of automation when using natural gas. Gas carburising in natural gas has been adopted in the Ts-60 furnace. The gas pressure is 150-250 mm water column. The duration of carburising to a

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depth of 1 mm is 4.5 hours. A tunnel furnace made of fireclay rings has been designed and built at the works. The furnace is heated with injector burners of medium pressure, and uses natural gas as a carburiser. In co-operation with the Gas Utilisation Institute, the design and construction of a high-speed heating furnace has been accomplished for the end faces of 32 mm dia rods, feeding a rod each 13-15 sec. An original design of a conveyor for transporting the rods from the furnace to the forging machine is being completed. The design, pursued by the lecturer, of a turbine burner of 30-40 m³/h capacity uses the energy of high-pressure gas to drive a fan which forces air for combustion from the atmosphere and ensures a torch-type gas-combustion process. Dolginova, M.Ye., Engineer, of the Bakinskiy sudoremontnyy zavod (Baku Ship Repair Yard) imeni Parizhskoy Kommuny delivered a paper on the use of natural gas for the smelting of cast iron. The method developed and tested in practice, which dispenses with coke, consists of constructing alongside an ordinary cupola furnace a small reflecting furnace operating

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with natural gas. The furnace has three burners supplied by one air manifold and one gas manifold which ensure the simultaneous control of all burners. The practical utilisation of gas-fired cast iron melting furnaces has shown that cast iron with a carbon content below 3% can be produced. The high temperatures achieved make it possible to introduce up to 15-20% of steel scrap into the charge and also to accomplish modification of the cast iron. It is stated that cast iron melted with gas has a low sulphur content and is distinguished by higher mechanical properties. Zamalin, P.S., Engineer, of the Khar'kovskiy elektromekhanicheskiy zavod (Khar'kov Electro-mechanical Works) reported on experience with the burning of natural gas in industrial furnaces. Ter-Misok'yan, Engineer, of the Rostsel'mash spoke on the use of gas drying and the conversion of electric furnaces to natural gas.

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Levitan, R.B., Engineer, of the Khar'kovskiy zavod
shveynykh mashin (Khar'kov Sewing Machine Works) reported
on workshop heating with natural gas using calorifiers.
There is 1 table.

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BYKOV, I. Ya.

The assembly of pattern parts in precision casting. Lit. proizv.
no. 8:29 Ag'55. (MLRA 8:11)

(Precision casting)

SOV-3-58-9-6/36

AUTHORS: Durov, S.A., Professor, Doctor of Chemical Sciences, and Bykov, I.Ya.; Vologdina, M.P.; Kravtsova, N.M.; Nemirovskiy, Ya.M.; Perova, N.I., and Torgashev, P.D., Candidates of Chemical Sciences

TITLE: The Training of Specialists in Chemistry - to Attain the Level of New Tasks (Khimicheskuyu podgotovku spetsialistov - na uroven' novykh zadach) Our Considerations (Nashi soobrazheniya)

PERIODICAL: Vestnik vysshey shkoly, 1958, Nr 9, pp 28-29 (USSR)

ABSTRACT: The authors consider that the article of Professor I.N. Putilova and Docent G.A. Raytsyn in Nr 7 of this periodical was published at the proper time, as it substantiates the necessity to bring the teaching of chemistry closer to the speciality of the respective vtuz, to revise the theoretical part of the course's program and to entitle the various vuzes to compose their own programs according to their individual sections. The authors (personnel of the Chairs of Inorganic and Organic Chemistry of the Novocherkassk Polytechnical Institute) set forth in the present article their considerations on the suggestions of I.N. Putilova and G.A. Raytsyn and de-

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SOV-3-58-9-6/36

The Training of Specialists in Chemistry - to Attain the Level of New Tasks?
Our Considerations

scribe how instruction in chemistry is organized in the Institute's various faculties. Since the number of students coming from plants is increasing year to year, and as many of them require a review course, the most important sections of elementary chemistry should be retained. The idea of specializing chemistry according to the type of vuz is absolutely correct.

There is 1 Soviet reference.

ASSOCIATION: Novochoerkasskiy politekhnicheskii institut imeni S. Ordzhonikidze (Novochoerkassk Polytechnical Institute imeni S. Ordzhonikidze)

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BYKOV, I. Ye.

PA 64/49T9

USSR/Chemistry - Test Equipment
Chemistry - Polarographs

Nov 48

"Visual Polarograph Developed by the Ural Affiliate
of the Academy of Sciences USSR," A. G. Stromberg,
I. Ye. Bykov, Ural Affiliate, Acad Sci USSR, 3 pp

"Zavod Lab" Vol XIV, No 11

This development project has been going on for
several years. Present model operates off a
4-volt battery and has some 25 coils with a total
resistance of 10 ohms and fine tuning coils with a
total resistance of one ohm. Describes circuit
and some performance characteristics. No
evaluation given.

64/49T9

BYKOV, I. YE.

PA 46/49T24

USSR/Chemistry - Cadmium
Chemistry - Polarography.

Feb 49

"Polarographic Study of Cadmium Complexes," A. G. Stromberg, I. Ye. Bykov, Inst of Chem and Metal, Ural Affiliate, Acad Sci USSR, 13 pp

"Zhur Obshch Khim" Vol XIX, No 2 - 145

Measured polarographic half-wave potentials of cadmium in solutions of various complex-forming agents. Determined coordination numbers and constants of dissociation by polarographic method for cadmium complexes with potassium iodide, ammonium, and sodium thiosulfate. Submitted 29 Oct 47.

46/49T24

BYKOV, I.Ye.; STROMBERG, A.G.

Polarographic determination of cadmium in the presence of a large quantity of copper. *Trudy Kom. anal. khim.* 4:63-74 '52.

(Cadmium)

(MIRA 11:6)

(Polarography)

(Copper)

SOV/137-57-10-20563

Translation from: Referativnyy zhurnal, Metallurgiya, 1957, Nr 10, p 311 (USSR)

AUTHOR: Bykov, I. Ye.

TITLE: Separation of Certain Metals by Means of Ion Exchange in the Presence of a Nitroso-R Salt (Razdeleniye nekotorykh metallov pri pomoshchi ionnogo obmena v prisutstvii nitrozo-R-soli)

PERIODICAL: Izv. vost. fil. AN SSSR, 1956, Nr 1, pp 60-64

ABSTRACT: A study of the behavior of Cu, Ni, Zn, Co, Fe, Pb, and Cd during the cation exchange on an KU-1 type "espatit" in the presence of a nitroso-R salt. Co is separated from elements that impede its colorimetric determination by treating the solutions containing a nitroso-R salt by the ion-exchange procedure. Solutions with various pH are passed through absorption columns. Acid solutions are passed through a cationite in the H form; ammoniacal solutions are passed through a cationite in the ammoniacal form. After washing the columns, the metals absorbed are extracted with 50 cc of 3M HCl and determined quantitatively. In all the pH investigated Zn, Pb, and Cd are absorbed by the cationite while Co, Fe, Ni, and Cu pass into the filtrate. Cu and Ni

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SOV/137-57-10-20563
Separation of Certain Metals by Means of Ion Exchange in the Presence (cont.)

complexes are stable in a narrow pH range and decompose readily in an acid solution. The determination of Co in the filtrate is feasible after the decomposition of the nitroso-R salt by evaporation with H_2SO_4 in the presence of H_2O_2 . From the data adduced it follows that when the conditions for the experiment are observed Zn and Cd are completely absorbed by the cationite, while 99% of Cu, Ni, Co, and Fe pass into the filtrate.

K. K.

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ZELYANSKAYA, A. I., BYKOV, I. YE., and GORSHKOVA, L. S.

"The Separation of Selenium and Tellurium by a Cationite."

"Polarographic Determination of Tetravalent Selenium and Tellurium when Jointly Present."

"Effect of Heavy Metals on the Polarographic Waves of Selenium and Tellurium."

Collection of Studies in the Metallurgy of Heavy Non-Ferrous Metals, Sverdlovsk, 1957, 168p.

BYKOV, I.Ye.

Separation of some metals by ion exchange in the presence of nitroso-
R salt. Izv. vost. fil. AN SSSR no.1:60-64 '57. (MIRA 11:4)

1. Ural'skiy filial AN SSSR,
(Ion exchange) (Metals) (Naphthol)

Translation from: Referativnyy zhurnal. Metallurgiya, 1959, Nr 1, p 285 (USSR) SOV/137-59-1-2171

AUTHORS: Zelyanskaya, A. I., Bykov, I. Ye., Gorshkova, L. S.

TITLE: On the Separation of Selenium and Tellurium by a Cationite
(K voprosu o razdelenii selena i tellura kationitom)

PERIODICAL: Tr. In-ta metallurgii, Ural'skiy fil. AN SSSR, 1957, Nr 1, pp 151-154

ABSTRACT: For a quantitative separation of Se from Te, as well as from Ce, Fe and Zn, pH 1.4 solutions are passed through the "espatig" [trans-literated] KU-1 cationite. Te, Cu, Fe, Pb, and Zn are completely absorbed by the cationite. Te is then extracted with a solution of NH_4OH (1:2), and the cationite is washed with H_2O and 5% HCl to a neutral reaction. It is shown that Se can be quantitatively separated from Cu, Fe, and Zn. The presence of Pb lowers the results. Hydrochloric acid solutions and ammoniacal solution containing sodium versenate are suitable for separating Se and Te from Cu, Fe, and Zn. Se passes through into the filtrate in all cases.

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V. P.

SOV/137-58-11-23831

Translation from: Referativnyy zhurnal. Metallurgiya, 1958, Nr 11, p 280 (USSR)

AUTHORS: Zelyanskaya, A. I., Bykov, I. Ye., Gorshkova, L. S.

TITLE: Effect of Heavy Metals on the Polarographic Waves of Selenium and Tellurium (Vliyaniye tyazhelykh metallov na polyarograficheskiye volny selena i tellura)

PERIODICAL: Tr. In-ta metallurgii. Ural'skiy fil. AN SSSR, 1957, Nr 1, pp 161-169

ABSTRACT: The authors investigate the effect of some heavy metals on the polarographic waves of Se and Te in the $\text{NH}_3\text{NH}_4\text{Cl}$ solution. The Cu wave precedes the Te wave, and two separate waves appear on the polarogram, but when the ratio $\text{Cu}:\text{Te} > 1$ the Te wave is appreciably lowered and a preliminary separation of Cu is necessary. Zn, which is reduced at a more negative potential, does not affect the Te wave; however, at a $\text{Te}:\text{Zn} > 1$ ratio Te lowers the Zn wave. Pb adsorbs Te when it precipitates; when Na versenate B is added, Pb is reduced at a more negative potential than Te, whereas the addition of gelatine displaces the $E_{1/2}$ of Pb to -1.3 v. The presence of 0.05% gelatine completely suppresses the Pb wave, after which the determination

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Effect of Heavy Metals on the Polarographic Waves of Selenium and Tellurium

of Te proceeds without impediments. The impeding effect of Fe is eliminated by the addition of 0.1 mole/liter of tartaric acid and 0.1% gelatin; in this case Fe is reduced at a more negative potential than Te and has no effect on the magnitude of its wave. Determination of Se is impeded by the presence of Cu, Pb, Cd, and Fe. When the molar concentration ratio $\text{Te:Se} > 1$ Te also impedes the determination. The effect of Zn, Ni, and Co^{2+} is eliminated by the addition of Na versenate B.

N. B.

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Bykov, I. Ye.

USSR/Physical Chemistry - Electrochemistry.

B-12

Abs Jour: Referat. Zhurnal Khimiya, No 2, 1958, 3980.

Author : I.Ye. Bykov, A.I. Zelyanskaya.

Inst : Academy of Sciences of USSR.

Title : Influence of Tellurium on Polarographic Wave of Selenium.

Orig Pub: Izv. vost. fil. AN SSSR, 1957, No 2, 47-51.

Abstract: The presence of SeO_3^{2-} does not influence the height of the TeO_3^{2-} wave on the background of 0.5 M NH_4Cl + 0.5 M NH_4OH . The height of the SeO_3^{2-} wave does not change up to $\text{Te} : \text{Se} = 1$. The SeO_3^{2-} wave becomes lower at a higher relative content of TeO_3^{2-} . In the author's opinion, Se^{2-} ions forming at the SeO_3^{2-} reduction diffuse into the solution and react with TeO_3^{2-} as follows:
$$2\text{Se}^{2-} + \text{TeO}_3^{2-} + 6\text{H}^+ \rightarrow 2\text{Se} + \text{Te} + 3\text{H}_2\text{O}.$$
 In order to verify this assumption, a SeO_3^{2-} solution was electrolyzed on a carbon cathode, after which an anode-cathode wave was revealed on the

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Translation from: Referativnyy zhurnal. Metallurgiya, 1958. Nr 11, p 280 (USSR)

AUTHORS: Zelyanskaya, A. I., Bykov, I. Ye., Gorshkova, L. S.

TITLE: Polarographic Determination of Quadrivalent Selenium and Tellurium When Both are Present (Polyarograficheskoye opredeleniye chetyrekh-valentnykh selena i tellura pri sovместnom ikh prisutstvii)

PERIODICAL: Tr. In-ta metallurgii. Ural'skiy fil. AN SSSR, 1958, Nr 1, pp 155-160

ABSTRACT: It is established that for the joint polarographic determination of Se and Te a basic electrolyte containing (in mole/liter) NH_4Cl 0.75, NH_4OH 0.25, Na_2SO_3 0.1 is the most suitable. In order to eliminate the maxima, the polarographic analysis is performed in the presence of 0.002% gelatine: $E_{1/2}$ of Te = - 0.9 v and $E_{1/2}$ of Se = - 1.5 v (saturated control electrolyte). An increase in the concentration of gelatine causes a displacement of the Se wave in the negative sense, and its determination becomes impossible. Se can be determined polarographically at concentrations of 0.05-2 ~~mmole/liter~~ $\mu\text{mole/liter}$; the molar concentration of Te should not be higher than the Se concentration lest the Se wave be lowered. Nitrates and heavy metals should be absent. To

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Polarigraphic Determination of Quadrivalent Selenium and Tellurium (cont.)

dissolve Se and Te the precipitate of elemental Se and Te is obtained by any method and to this, together with the filtrate, 5 cc of freshly prepared solution of 25 mg KClO_3 in HCl (1:1) are added. The mixture is stirred, heated slightly, and upon dissolution neutralized with NH_4OH to methyl orange. The solution together with the paper, is transferred into a 50-cc flask, basic electrolyte is added to the mark, and the mixture is analyzed polarographically. The method was verified on specimens of dust and cake. Two-gram samples were used for the analysis.

N. G.

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SOV/137-59-2-4837

Translation from: Referativnyy zhurnal. Metallurgiya, 1959, Nr 2, p 353 (USSR)

AUTHORS: Bykov, I. Ye., Zelyanskaya, A. I., Gorshkova, L. S.

TITLE: Polarographic Determination of Tetravalent Selenium and Tellurium
(Polyarografiya chetyrekhvalentnykh selena i tellura)

PERIODICAL: Tr. In-ta metallurgii. Ural'skiy fil. AN SSSR, 1958, Nr 2, pp 275-279.

ABSTRACT: The authors examined the parameters of the polarographic determination of Se and Te. In acid solutions their reduction proceeds with formation of several waves, whereas in strong alkaline solutions the Se-wave disappears. Polarographic determination of Se and Te when both are present is carried out in an electrolyte of the following composition (in mole/liter): NH_4Cl 0.5, NH_4OH 0.5, Na_2SO_3 0.1, gelatin 0.002%, at a pH ~9. With a concentration of gelatin $\geq 0.01\%$ the Se wave blends with the terminal ascending branch of the polarogram. In the presence of a number of heavy metals a decrease of the diffusion current of Se and Te is observed; moreover, the Se wave decreases in the presence of Te. However, in small amounts of the elements the dependence of the Se wave on Te is imperceptible. The authors developed a technique

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Polarographic Determination of Tetravalent Selenium and Tellurium

for determination of Te in the presence of Fe (in a tartaric-acid solution), or Te in the presence of Pb, of Se in the presence of Zn (in an E.D.T.A. solution), and of Te in the presence of Cu (alkaline cyanide solution). In order to determine Se and Te in products of complex composition it is necessary to separate them from other elements first.

N. G.

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BYKOV, I.Ye.; GORSHKOVA, L.S.

Reduction of quadrivalent tellurium on dropping mercury electrodes
in alkaline cyanide solutions. Izv. Sib. otd. AN SSSR no. 4:62-66
'58. (MIRA 11:9)

1. Ural'skiy filial AN SSSR.
(Reduction, Electrolytic) (Tellurium) (Polarography)

BYKOV, I.Ye.

Historical development and definition of the concept of a
chemical compound. Filos. vop. fiz. i khim. no. 1:83-85
'59. (MIRA 14:2)

(Chemistry--Philosophy)

BYKOV, I.Ye.; GORSHKOVA, L.S.

Lead determination in leaded brass. Trudy Inst.met.UFAN SSSR
no.3:127-129 '59. (MIRA 13:4)
(Brass--Analysis) (Lead--Analysis)

5(4) 18(6)

SOV/32-25-6-11/53

AUTHORS:

Bykov, I. Ye., Gorshkova, L. S.

TITLE:

Polarographic Determination of Tellurium in Copper Alloys
(Polyarograficheskoye opredeleniye tellura v mednykh splavakh)

PERIODICAL:

Zavodskaya Laboratoriya, 1959, Vol 25, Nr 6, pp 674 - 676 (USSR)

ABSTRACT:

The polarographic determination of tellurium in alkaline cyanide solutions may be disturbed by heavy metals reduced before Te. The influence exerted by elements (Cu, Zn, Sn, Sb, Ni, Co, Pb, Cd, Fe, Mn) occurring in copper alloys must be taken into account as well. In the case under review, pertinent investigations were carried out with a polarograph of the visual type (built in the workshop of the UFAN (Ural Branch of the AS USSR)) and an electrolyzer with an outer anode. The following was found: Zn up to 100 mg does not disturb the polarographing of Te. Only in the case of more than 50 mg Sn a slight increase in the diffusion current of Te is observed. Ni and Co disturb the tellurium determination only when in higher concentrations. Only in the case of a 20fold excess of Fe and Mn (with respect to Te) a diminution in the Te polarogram wave is observed. The disturbing influence of lead may

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Polarographic Determination of Tellurium in
Copper Alloys

SOV/32-25-6-11/53

be eliminated by a Trilon B addition. This holds only partly for cadmium, as the latter effects a maximum on the tellurium polarogram wave, which may not even be eliminated by an increase in the gelatin addition. Thus only cadmium disturbs the polarographic Te determination. An appropriate determination method was worked out on the standard samples Nr 66, 67, and 68 (Table) with different Te additions. The composition of the electrolyte applied was the following: 0.65 mol/l KCN, 0.25 mol/l NaOH, 0.2 mol/l Na_2SO_3 and 0.02% of gelatin. There are 3 figures, 1 table and 2 Soviet references.

ASSOCIATION: Institut metallurgii Ural'skogo filiala Akademii nauk SSSR
(Institute of Metallurgy of the Ural Branch of the Academy
of Sciences of the USSR)

Card 2/2

BYKOV, I.Ye.

Using thiourea in the separation of metals by ion exchange. Izv.
Sib.otd.AN SSSR no.12:72-77 '61. (MIRA 15:3)

1. Ural'skiy filial AN SSSR, Sverdlovsk.
(Urea) (Ion exchange) (Metals—Analysis)

BORBAT, A.M.; BYKOV, I.Ye.

Exchange of experience. Zav.lab. 28 no.2:249 '62. (MIRA 15:3)

1. Kiyevskiy gosudarstvennyy universitet i laboratoriya metallov
Kiyevergo (for Borbat). 2. Institut metallurgii Ural'skogo filiala
AN SSSR (for Bykov).

(Spectroscopy) (Polarograph)

BYKOV, I.Ye.

Fast-dropping polarographic capillaries. Izv. Sib. otd. AN
SSSR no.2:81-89 '62. (MIRA 16:10)

1. Ural'skiy filial AN SSSR, Sverdlovsk.

BYKOV, I.Ye.

Polarographic properties of hexavalent tellurium. Trudy Inst.
met. UFAN SSSR no.8:97-100 '63. (MIRA 17:9)

BYKOV, I.Ye.; PLETNEVA, N.A.

Causes of error in the determination of selenium and tellurium.
Trudy Inst. met. UFAN SSSR no.8:111-117 '63.

(MIRA 17:9)

BYKOV, I.Ye.

Electrochemical masking of irreversible polarographic waves.
Zhur. anal. khim. 19 no.11:1299-1304 '64.

(MIRA 18:2)

1. Institut of Metallurgy, Sverdlovsk.

BYKOV, K.

Constant improvement. Sov.shakht. 10 no.4:15 Ap '61.
(MIRA 14:9)

1. Udarnik kommunisticheskogo truda shakhty No.15 tresta
Khakassugol'.
(Minusinsk Basin--Coal mines and mining)

BYKOV, K. A. (Engr)

Dissertation: "Induction Frequency Converter in a Single Machine Mode." Cand Techn
Sci, Kiev Order of Lenin Polytechnic Institute, 2 Jul 54. (Pravda Ukrainy, Kiev,
23 Jun 54)

SO: SUM 318, 25 Dec 1954

BYKOV, K.A.

Seminars at the Department of Biophysics. Vest. LGU 17 no.9:
155-156 '62. (MIRA 15:5)

(BIOPHYSICS--RESEARCH)

BYKOV, K.A.

Electroretinographic study of the critical interval of the
discreteness of the human visual analyser. Nerv. sist. no.5:
105-110 '64. (MIRA 18:3)

1. Kafedra biofiziki Leningradskogo gosudarstvennogo universiteta.

~~DECLASSIFIED~~

LOMONOSOV, Mikhail Vasil'yevich; TOPCHIEV, A.V., akad., red.; PETROVSKIY, I.G., akad., red.; ANDREYEV, P.N., akad., red.; BYKOV, K.M., akad., red.; KAZANSKIY, V.A., akad., red.; SHMIDT, O.Yu., akad., red.; SHCHERBAKOV, D.I., akad., red.; YUDIN, P.F., akad., red.; DELONE, B.N., red.; KOSH-TOYANTS, Kh.S., red.; SAMARIN, A.M., red.; LEBEDEV, D.M., prof., red.; FIGUROVSKIY, N.A., prof., red.; KUZNETSOV, I.V., kand. filos. nauk, red.; BERKOVICH, D.M., red. izd-va; NOVICHKOVA, N.D., tekhn. red.; KASHINA, P.Ye., tekhn. red.

[Selected works in chemistry and physics] Izbrannye trudy po khimii i fizike. Red. A.V. Topchieva. Stat'ia N.A. Figurovskogo. Primechania G.A. Andreevoi, O.A. Lezhnevoi i N.A. Figurovskogo. Moskva, Izd-vo Akad. nauk SSSR, 1961. 560 p. (MIRA 14:11)

1. Chlen-korrespondent AN SSSR (for Delone, Koshtoyants, Samarin).
(Lomonosov, Mikhail Vasil'evich, 1711-1765)
(Chemistry) (Physics)

BYKOV, K.P. (g.Kotlas)

The Pechora Railroad in the sixth five-year plan. Zhel.dor.transp.
37 no.11:28-32 W '55. (MLRA 9:2)

1.Nachal'nik Pechorskoy dorogi.
(Railroads--Management)

BYKOV, K.P. (Kotlas).

Experience with wintertime difficulties on the Pechora railroad.
Zhel.dor.transp.38 no.12:8-12 D '56. (MLRA 10:2)

1. Nachal'nik Pechorskoy dorogi.
(Railroads--Cold weather operation)

BYKOV, K.P.
BYKOV, K.P.

The Pechora mainline and its development. Zhel. dor. transp. 39 no.12:
21-25 D '57. (NIRA 11:1)

1. Nachal'nik Pechorskoy dorogi.
(Railroads)

BYKOV, Kh.I.; GURULEV, A.K., mashinist; CHIRKUNOV, A.G., inzh.-tekhnolog

More discussion concerning the ERL electric train. Elek. 1 topl.
tiaga 6 no.8:28-30 Ag '62. (MIRA 17:3)

1. Mashinist-instruktor depo im. Il'icha Moskovskoy dorogi (for Bykov). 2. Depo Leningrad-Passazhirskiy-Moskovskiy Oktyabr'skoy dorogi (for Chirkunov).

BYKOV, K.M., akademik [deceased]

From Harvey to the modern theory of blood circulation. K.M.
Bykov. Kaz. med. zhur. no. 1:6-11 Ja-F'61 (MIRA 16:11)

*

BYKOV, K.P.; DMITRIYEV, P.I.

Faultless repair in depots. Zhel.dor.transp. 46 no.9:71-72 S '64.
(MIRA 17:10)
1. Glavnyy inzh. Privolzhskoy dorogi (for Bykov). 2. Nachal'nik
proizvodstvenno-tekhnicheskogo otdela depo Balashov (for Dmitriyev).

LUKIN, V. (Moskva); POLOZOV I., elektromekhanik (Gomel'skaya oblast')
ZAMYATIN, K. (Sverdlovsk); NEYMAN, V. (Leningrad); GORBATYUK, S.
(Grodno); BYKOV, L. (Moskva); SMIRNOV, B. (Gori); PEL'TSMAN I.
(Leningrad)

Advices from experienced people. Za rul. 19 no. 2:14-15 F '61.
(MIRA 14:4)
(Motor vehicles--Equipment and supplies)

BYKOV, I.

Workers of the Moscow Canal are getting ready to greet the
22d Congress of the CPSU. Rech. transp. 20 no.10:42-45 0 '61.
(MIRA 14:9)

1. Glavnyy inzhener Upravleniya kanala imeni Moskvy.
(Moscow Canal--Hydraulic engineering)

BYKOV, L.

Maintenance workers on the Moscow Canal are striving for a
successful completion of the seven-year plan. Rech. transp.
23 no.7:30-32 J1 '64. (MIRA 17:10)

1. Glavnyy inzh. Upravleniya kanala imeni Moskvyy.

L 44423-66

ACC NR: AP6022047 (AN) SOURCE CODE: UR/0310/66/000/003/0035/0036

AUTHOR: Bykov, L. (Chief Engineer)

ORG: Administration of the Canal imeni Moskva (Upravleniye Kanala)

TITLE: Equipment for uninterrupted operation of sluices under icy conditions

SOURCE: Rechnoy transport, no. 3, 1966, 35-36

TOPIC TAGS: waterway engineering, inland waterway security, ice effect, sluice

ABSTRACT: A system of devices and procedures for operating sluices under extreme cold and icy conditions and for providing safe inland waterways is proposed by the author. The system is designed to cope with the ice cover which forms on the main water chamber and in the approach canals, accumulation of floating ice-blocks, effect of freezing on the main chamber walls, gates, equipment, and installations which, when covered with ice, obstruct the sluice operation in either direction, causing overloading and eventually breakdown of electromechanical equipment. Experience has shown that even an icebreaker cannot pass a heavily iced sluice. The new equipment introduces three types of devices, each playing a part in ice

Card 1/2

UDC: 626.4.004

L 44423-66

ACC NR: AP6022047

prevention, removal, and prevention of ice interference with navigation. The devices are: 1) electrically controlled ice-retaining, vertically moving walls, one placed at the upper gate, the other at the lower gate; 2) two sets of flow-regulating shutters mounted at both ends; 3) an electrical heating system with units located either in the approach canals or near the flow-regulating shutters. Two drawings and two photos showing the configuration and arrangement of equipment (except the heating system) are presented in the original article, with description and operating instructions. The equipment was tested at sluice no. 9 on the Canal imeni Moskva and was proved workable. Orig. art. has: 3 figures. [KP]

SUB CODE: 13/ SUBM DATE: none

Card 2/2

BUKOV, V.A., BYKOV, L.A., VALUK, V.A., VARTBARONOV, R.A., ZHILIS, E.F.,
KONDRAKOV, V.M., KUZ'MIN, V.A., SYCHEV, G.I. PROLOV, N.I.,
POKIN, A.S., KHARINSKIY, A.N. (Saratov)

New method for producing stable neurogenic hypertension in dogs
[with summary in English]. Arkh.pat. 20 no.5:21-27 '58 (MIRA 11:6)
(HEART, anatomy and histology,
thebesian vessels, review (Rus))

Bykov, L.A.

PHASE I BOOK EXPLOITATION SOV/4434

Fel'dshteyn, Emmanuil Iosifovich, Boris Ivanovich Naumov, Viktor Vasil'yevich Konyashov, and Leonid Alekseyevich Bykov

Rezhimy rezaniya na tokarnykh avtomatakh (Cutting Regimes for Operations On Automatic Lathes) Moscow, Mashgiz, 1960. 329 p. Errata slip inserted. 13,000 copies printed.

Managing Ed. for Literature on the Economics and Organization of Machine Building (Mashgiz): T. D. Saksaganskiy, Engineer; Ed.: I. I. Pinegin; Tech. Ed.: T. F. Sokolova.

PURPOSE: This book is intended for the technicians, designers, machine-operation time standard setters and foremen of mechanical shops, and also for the setup-men of automatic lathes.

COVERAGE: The book includes methods for calculating cutting regimes of single-and multiple-spindle automatic lathes. Reference data are given on recommended feeds and cutting speeds and on the kinematics and dynamics of the most popular models of automatic lathes. Standards for cams (of the multiple-spindle automatic lathes) and instructions for design (of single-spindle automatic lathes) are

Card 1/3

Cutting Regimes for Operations (Cont.)

SOV/4434

provided. The technique for calculations is illustrated with detailed examples. These data and standards are based on experimental studies conducted and put through practical tests at the Gor'kovskiy avtozavod (Gor'kiy Automobile Plant). No personalities are mentioned. There are 22 references, all Soviet.

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Card 2/3	

LIPATOV, A.P., insh.; BYKOV, L.A.

New design of a shifting disappearing thrust. Konstr.krup.mash.
no.1:67-72 '62. (MIRA 16:2)

(Rolling mills)

KOROLEV, A.V.; KHAMRABAYEV, I.Kh., doktor geol.-min. nauk, glav.
red.; BATALOV, A.B., kand.geol.-min. nauk, ~~zam.~~ glav. red.
[deceased]; BAYMUKHAMEDOV, Kh.N., doktor geol.-min. nauk,
red.; BYKOV, L.A., red.; GAR'KOVETS, V.G., red.;
KHLOBUSTOV, A.A., kand. geol.-min. nauk, red.; TERNOVSKAYA,
R.M., red.; GOR'KOVAYA, Z.P., tekhn. red.

[Select works] Izbrannye trudy. Tashkent, Izd-vo AN UzSSR.
Vol.1. 1963. 499 p. (MIRA 16:12)
(Ore deposits)

BORODAVKIN, P.P. (Ufa); BYKOV, L.I. (Ufa); YABLONSKIY, V.S. (Ufa)

Calculations for the stability of underground pipelines. Stroi.
truboprov. 8 no.5:21-24 My '63. (MIRA 16:5)
(Pipelines)

BORODAVKIN, P.P.; BYKOV, L.I.; YABLONSKIY, V.S. [deceased]

Stability of underground and surface pipelines. Trudy NIITransneft:
no.3:155-164 '64. (MIRA 18:2)

BORODAVKIN, F.I.; BYKOV, L.I.; YABLONSKIY, V.S. [deceased]

Determining the stability of an underground pipeline during the
initial bending of its axis. Stroitel'struboprov. 9 no.11:15-16 N
164. (MIRA 18:2)

1. Ufimskiy neftyanoy nauchno-issledovatel'skiy institut, Ufa.

BOGODAVKIN, P.P.; BYKOV, I.I.

Overhead "hot" pipe laying shaped like a flexible curved coil.
Izv.vys.ucheb.zav.; nef't' i gaz 7 no.4:79-83 '64. (MIRA 17:5)

1. Ufimskiy nef'tyanoy institut.

BORODAVKIN, P.P.; BYKOV, L.I.

Experimental investigation of the stability of pipelines laid in fills.
Transp. i khran. nefti i nefteprod. no.8:9-11 '65. (MIRA 18:9)

1. Ufimskiy neftyanoy institut.

BYKOV, L.I.; BORODAVKIN, P.P.

Experimental investigation of the stressed state of overground
"hot" pipelines. Transp. i khran. nefti i nefteprod. no.5:
8-11 '65. (MIRA 18:10)

1. Ufimskiy neftyanoy institut.

BYKOV, L. N.
BYKOV, L. N.

600

1. BYKOV, L. N., KOMAROVSKIKH, S. I.

2. USSR (600)

"Problem of Extinguishing Underground Fires in Copper Pyrite Mints," Iz. Ak. Nauk SSSR, Otdel. Tekh. Nauk, No. 7-8, 1941. Mining Geological Institute Ural Affiliate Academy of Sciences USSR, Submitted 10 March 1941.

9. Report U-1530, 25 Oct 1951

BYKOV, L. N., VINOGRADOVA, T. I.

"Concerning the Question of Retardation of the Oxidizing Processes in Pyrite Mines,"
Iz. Ak. Nauk SSSR, Otdel. Tekh. Nauk, no. 4-5, 1944. Mining Geology Institute,
Ural Affiliate, Academy of Sciences, USSR, Submitted 3 Nov 1943.

BYKOV, L.N.																																																																													
RECOGNITION OF THE DANGEROUS PHASE OF OXIDATION PROCESSES IN PYRITE MINES. L. N. Bykov and T. Vinogradova. Metall. Acad. Sci. U.S.S.R., 1944, 348 MO.																																																																													
<p>A change in the compn. of the air is observed during the period immediately preceding the appearance of fires in pyrite mines. High temps. in acid media facilitate the hydrolysis of wood, and result in the liberation of terpenes and of satd. and unsatd. hydrocarbons. Analyses of 8 air samples taken during various mine fires revealed the following contents of CO_2, O_2, and CO, resp. 2.0, 18.8, 5.6, 0.73, 0.30, 0.00, 0.01, and 0.02%; 11.2, 17.1, 8.8, 19.7, 19.3, 18.4, 19.0, and 16.7%; 0.070, 0.077, 0.140, 0.010, 0.020, 0.017, 0.015, and 0.018%. Heavy hydrocarbons were found in all gases. Changes in the compn. of mine waters were also observed during the period preceding the fire. The acidity of water increased, sometimes reaching 20-30 g. of free H_2SO_4 per l. of water. The color of water changed, owing to the increase in the concn. of the sulfates of Cu and other metals. The temp. of the water increased. The zone of intensive oxidation processes is characterized by a high acidity (up to 24-30 g. l.) and high contents of Fe^{++}, and Fe^{+++}. Three references.</p> <p style="text-align: right;">W. R. Hein</p>																																																																													
ASB-SLA METALLURGICAL LITERATURE CLASSIFICATION																																																																													
<table border="1"> <tr> <td>1</td><td>2</td><td>3</td><td>4</td><td>5</td><td>6</td><td>7</td><td>8</td><td>9</td><td>10</td><td>11</td><td>12</td><td>13</td><td>14</td><td>15</td><td>16</td><td>17</td><td>18</td><td>19</td><td>20</td><td>21</td><td>22</td><td>23</td><td>24</td><td>25</td><td>26</td> </tr> <tr> <td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td> </tr> </table>																										1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26																										
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BYKOV, I. N.

PA 52/49787

USSR/Mines
Mechanization
Coal

JUL 49

"Review of B. A. Rozentureter's 'Machine Cutting
in Shafts, Dangerous Because of Gas or Dust,'"
I. N. Bykov, 2 pp

"Iz Ak Nauk SSSR, Otdel Tekh Nauk" No 7

Very favorable review of subject book, first in
Soviet scientific-technical literature to give
detailed consideration of phenomena occurring
in machine cutting of very gaseous coal layers
and well-grounded engineering recommendations
for correct, effective, and safe exploitation of

52/49787

USSR/Mines (Contd)

JUL 49

cutting machines under these conditions. This
problem is quite important, since mechanization
of mining has not encompassed even narrow coal
seams, deep-dipping seams, and seams with high
gas content.

52/49787

BYKOV, L. N.

Rudnichnye pozhary [Mine fires]. Moskva, Ugletekhizdat, 1953. 136 p.

SO: Monthly List of Russian Accessions, Vol. 6 No. 12 March 1954.

BYKOV, L N.

MUSTEL', Pavel Ivanovich; BYKOV, L.N., retsenzent; BODYAGIN, M.N.,
retsenzent; YEFREMOVA, T.K., retsenzent; BORONINA, L.D., retsenzent;
KHARUV, A.A., redaktor; SHUSTOVA, V.M. redaktor izdatel'stva; MIKHAYLOVA,
V.V. tekhnicheskii redaktor

[Mine ventilation] Ventiliatsiia shakht. Moskva, Gos. nauchno-tekhn.
Izd-vo lit-ry po chernoi i tsvetnoi metallurgii, 1957. 222 p.
(MLRA 10:5)

(Mine ventilation)

BYKCV, L.N., prof., doktor tekhn.nauk

Theory and practice of controlling coal and gas outbursts in mines.

Ugol' 33 no.4:14-19 Ap '58.

(MIRA 11:4)

(Mine gases) (Coal mines and mining--Safety measures)

ABRAMOV, F.A., prof., doktor tekhn.nauk; BALTAYTIS, V.Ya., inzh.;
 BARON, L.I., doktor tekhn.nauk; BATALIN, S.A., dotsent, kand.
 tekhn.nauk; BYKOV, L.N., prof., doktor tekhn.nauk; VESELOVSKIY,
 V.S., prof., doktor tekhn.nauk; VLADIMIRSKIY, V.V., kand.tekhn.
 nauk [deceased]; VORONIN, V.N., doktor tekhn.nauk [deceased];
 VORONINA, L.D., kand.tekhn.nauk; VOROPAYEV, A.F., prof.,doks.tekhn.
 nauk; ZHUKOV, G.I.; KOMAROV, V.B., prof., doktor tekhn.nauk;
 KRICHEVSKIY, R.M., kand.tekhn.nauk; KSENOFONTOVA, A.I., dotsent,
 kand.tekhn.nauk; LIDIN, G.D., doktor tekhn.nauk; MILETICH, A.F.,
 dotsent, kand.tekhn.nauk; MUSTEL', P.I., dotsent, kand.tekhn.
 nauk; NOVIKOV, K.P., kand.tekhn.nauk; OGIEVSKIY, V.M., prof.,
 doktor tekhn.nauk [deceased]; POLESIN, Ya.L., inzh.; RIPP, M.G.,
 dotsent, kand.tekhn.nauk; SOBOLEV, G.G., inzh.; SOLOV'YEV, P.M.,
 inzh.; SUKHAREVSKIY, V.M., kand.tekhn.nauk; KHEYFITS, S.Ya.,dotsent,
 (Continued on next card)

ABRAMOV, F.A.---(continued) Card 2.

kand.tekhn.nauk; KHODOT, V.V., kand.tekhn.nauk; SHCHERBAN',
A.N.; TERPIGOREV, A.M., glavnyy red.; SKOCHINSKIY, A.A., otv.
red.toma; ZAYTSEV, A.P., zam. otv.red.toma; BOBROV, I.V., red.
toma; KOMAROV, V.B., red.toma; SIRYACHENKO, F.N., red.toma;
VARZIN, A.V., kand.tekhn.nauk, red.toma; KLIMANOV, A.D., dots.,kand.
tekhn.nauk, red.toma; KRIVONOGOV, K.K., inzh., red.toma; NEUYMIN,
I.N., inzh., red.toma; TITOV, N.G., doktor tekhn.nauk, red.toma;
CHIZHOV, B.D., kand.tekhn.nauk, red.toma; GNEDIN, V.Ye., red.
izd-va; NIKOLAYEV, V.F., red.iszd-va; BASHEVA, T.A., red.iszd-va;
PROZOROVSKAYA, V.L., tekhn.red.

[Mining; an encyclopedic dictionary] Gornoe delo; entsiklope-
dicheskiy spravochnik. Glav.red. A.M.Terpigorev. Chleny glav.
red.: A.I.Barabanov i dr. Moskva, Gos.nauchno-tekhn.iszd-vo lit-ry
po ugol'noi promyshl. Vol.6. [Mine atmosphere and ventilation;
controlling dust, gases, and fires; mine rescue work] Rudnichnaya
atmosfera i ventilatsiya; Bor'ba s pyl'iu, gazami i pozharami;
Gornospasatel'noe delo. Redkollegiya toma: A.A.Skochinskii i dr.
1959. 375 p. (MIRA 12:6)

1. Chlen-korrespondent AN USSE (for Shcherban').
(Mine ventilation) (Mine rescue work)

BYKOV, L.N. [Bykov, L.M.] (Kiyev); LIPKOVSKIY, K.A. [Lypkivs'kyi, K.O.]
(Kiyev)

Three-phase transformer device for reversing rectified current in
galvanizing tanks. Avtomatyka no.5:65-68 '61. (MIRA 14:10)
(Electric current converters) (Galvanizing)

BYKOV, L.N., prof.; KLJMANOV, A.D., dotsent; ASTAKHOV, Ye.M., inzh.

Comment on M.A. Krainikov's article: "Calculating air in accordance with gas content and controlling the ventilation of workings." Bezop.truda v prom. 5 no.11:31 N '61.

(MIRA 14:11)

1. Bel'skiy goranyy institut.

(Mine ventilation)

(Krainikov, M. A.)

BYKOV, L.N.

Magnetic time relay. Priborostroenie no.12:20-21 D '61.
(MIRA 14:12)
(Electric relays)

S/103/62/023/012/012/013
D201/D308

AUTHORS: Bykov, L.N., Kubyshin, B.Ye., and Lipkovskiy, A.A. (Kiev)

TITLE: Automatic contactless transformer installations for reversing the D.C. current in 6 PT-200 (BRT-200) galvanic baths

PERIODICAL: Avtomatika i telemekhanika, v. 23, no. 12, 1962, 1692 - 1700

TEXT: The authors describe the principle of operation and the construction of the arrangement, which consists of a power stage (two 3-phase transformers), intermediate 3-phase magnetic amplifiers and a pulse generator in the form of a modified contactless programmer. The supply is 380/220 V. The arrangement has no contacts and no moving or revolving parts. When the emf at the secondaries of the operating transformer is equal to the voltage drop at the bleeder resistor and at the load, no parasitic currents exist in the idle arms. When the voltage across the bleeder is not equal to that at the

Card 1/2

Automatic contactless ...

S/103/62/023/012/012/013
D201/D308

load, the resulting parasitic currents are small and do not increase with magnetization of magnetic amplifiers. This is so because magnetic amplifiers are operating outside the 'self-reversibility' limits and are of the half-wave type, which makes them more economical as compared with full-wave amplifiers. A special type of voltage feedback is applied, which makes it possible to dispense with bias windings in the amplifiers. The primaries of transformers are shunted by capacitors which are adjusted to resonate with the minimum inductances of the a.c. windings of magnetic amplifiers. This improves the time-response and makes the required control current smaller. The arrangement is immune to the load circuit being s.c. or o.c., which is especially important in the use of galvanic baths and can be used with other types of load. There are 6 figures.

✓

SUBMITTED: June 5, 1962

Card 2/2

BYKOV, L.N., doktor tekhn. nauk, prof.; KSENOFONTOVA, A.I., prof.;
KLIMANOV, A.D., kand. tekhn. nauk; KRICHEVSKIY, R.M., kand.
tekhn. nauk; PREOBRAZHENSKAYA, Ye.I., inzh.; RASKIN, I.A.,
kand. tekhn. nauk; USHAKOV, K.Z., kand. tekhn. nauk; KHAREV,
A.A., kand. tekhn. nauk; KHEYFITS, S.Ya., kand. tekhn. nauk;
ZAKHAROV, M.I., red. izd-va; GIL'MAN, S.E., red. izd-va;
MAKSIMOVA, V.V., tekhn. red.; SHKLYAR, S.Ya., tekhn. red.

[Handbook on mine ventilation] Spravochnik po rudnichnoi ventilia-
tsii. Pod red. A.I. Ksenofontovoi. Moskva, Gosgortekhzdat,
1962. 691 p. (MIRA 15:6)
(Mine ventilation--Handbooks, manuals, etc.)

BYKOV, L.N., prof.

Regularity or general pattern of distribution of initial formation
pressure. Izv. vys. ucheb. zav.; gor. zhur. 5 no.10:79-86 '62.
(MIRA 15:11)

1. Tul'skiy gornyy institut. Rekomendovana kafedroy rudnichnoy
ventilyatsii i tekhniki bezopasnosti.
(Mine gases) (Oil reservoir engineering)

BYKOV, L.N. (Kiyev); KUBYSHIN, B.Ye. (Kiyev); LIPKOVSKIY, K.A. (Kiyev)

The BPT-200 automatic contactless transformer device for
reversing rectified current in electrolytic tanks. Avtom.1
telem. 23 no.12:1692-1700 D '62. (MIRA 15:12)
(Electric current rectifiers)
(Electrolytic tanks)

BYKOV, Leonid Nikolayevich; OREKHOV, V.S., kand. tekhn. nauk, red.;
LUCHKO, V.S., red.izd-va; OVSEYENKO, V.G., tekhn. red.;
SHKLYAR, S.Ya., tekhn. red.

[~~Mine~~ fires] Rudnichnye pozhary. Moskva, Gosgortekhnizdat.
1963. 158 p. (MIRA 16:6)

(Mine fires)

L 17886-63 EWT(1)/BDS A:FTG/ASB
ACCESSION NR: AP3004283 S/0119/63/000/007/0012/0015

AUTHOR: By*kov, L. N. 53

TITLE: Trigger-type converter (Author's Certificate no. 130566)

SOURCE: Priborostroyeniye, no. 7, 1963, 12-15

TOPIC TAGS: infralow-frequency converter

ABSTRACT: A new trigger-type converter of 50-cps power into infralow-frequency power is described. It is based on two choke-type magnetic amplifiers operating as triggers and controlled by MTKh-90 glow-discharge cold-cathode tubes. A connection diagram (Abstracter's note: printed in reverse!), magnetic-amplifier characteristics, and detailed technical data are given in the article. As a result of experimental verification, it is claimed that the converter: (1) can operate satisfactorily within -50 +50C; (2) as a contactless device is shockproof and dustproof; (3) has a long life; (4) pulse duration and spacing can

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L 17886-63

ACCESSION NR: AP3004283

be independently adjusted within 1.8-109 sec; (5) starts automatically on the appearance of supply voltage. Orig. art. has: 3 figures and 1 table.

ASSOCIATION: none

SUBMITTED:

DATE ACQ: 08Aug63

ENCL: 00

SUB CODE: IE

NO REF SOV: 002

OTHER: 000

Card 2/2

BYKOV, L.N., prof., doktor tekhn. nauk; KLIMANOV, A.D., dotsent, kand.
tekhn. nauk

Dust content of the air and ways of reducing it in Moscow Basin
Mines. Nauch. trudy Tul. gor. inst. no.4:3-16 '61. (MIRA 16:8)
(Moscow Basin--Mine dusts)

BYKOV, L.N.

Nature of sudden outbursts of minerals in mines. Trudy MakNII
15:87-125 '63. (MIRA 17:11)

BYKOV, L.N., inzh.

Ferroresonant three-phase generator. Energ. i elektrotekh. prom.
no.4:22-24 O-D '63. (MIRA 17:10)

BYKOV, L.N., inzh.; ZGURSKIY, V.A., inzh.

BRT-200M type device for reversing rectified current in a
dimensional silverplating tank. Energ. i elektrotekh. prom.
no.4:33-36 O-D '64. (MIRA 18:3)

BYKOV, I.N., prof.; KLIMANOV, A.D., dotsent; SOKOLOV, E.M., inzh.;
SULIA, M.B., inzh.

Liberation of gas and calculation of the amount of air needed
for sections with powered, movable supports and complexes. Izv.
vys. ucheb. zav.; gor. zhur. 7 no.10:56-60 '64.

(MIRA 18:1)

1. Tul'skiy politekhnicheskii institut. Rekomendovana kafedroy
promyshlennoy aerologii i tekhniki bezopasnosti.